

What is claimed is:

1. A communication apparatus for playing sound signals, comprising a cellular phone and a wireless earphone, the cellular phone comprising:
  - a music playing module used to output music data;
  - 5 a first sound processing module used to encode the music data and output digital data;
  - a first Bluetooth module used to transmit the digital data; and
  - a mobile communication control module used to transmit/receive radio signals and control the music playing module; and
  - 10 the wireless earphone comprising:
    - a second Bluetooth module used to receive the digital data from the first Bluetooth module;
    - a second sound processing module used to decode the digital data;
    - and
    - 15 an output unit used to output digital data decoded by the second sound processing module.
2. The apparatus as claimed in the claim 1, wherein the music playing module is a radio circuit.
3. The apparatus as claimed in the claim 1, wherein the music playing  
20 module comprises:
  - a memory used to store a music file; and
  - an MP3 processing module used to play the music file.
4. The apparatus as claimed in the claim 1, wherein the output unit comprises a left channel speaker and a right channel speaker.

5. The apparatus as claimed in the claim 4, wherein the left or the right channel speaker is independently disposed in another housing via an extended line.
6. The apparatus as claimed in the claim 5, wherein the extended line is detachable.
7. A communication method for playing sound signals, comprising:  
    providing a cellular phone equipped with a first Bluetooth module;  
    encoding music data played by the cellular phone according to a Bluetooth protocol to form digital data and radioing the digital data via the first Bluetooth module of the cellular phone;  
    receiving the digital data via a wireless earphone equipped with a second Bluetooth module and decoding the digital data; and  
    outputting the decoded digital data via the wireless earphone.
8. The method as claimed in the claim 7, wherein the music data are in an MP3 format.
9. The method as claimed in the claim 7, wherein the music data are signals received by a radio.
10. The method as claimed in the claim 7, wherein the wireless earphone outputs the decoded digital data via two sound channels.
11. A cellular phone for transmitting sound signals, comprising:  
    a music playing module used to output music data;  
    a sound processing module used to encode the music data and output digital data;  
    a Bluetooth module used to transmit the digital data; and

a mobile communication control module used to transmit/receive radio signals and control the music playing module.

12. The cellular phone as claimed in the claim 11, wherein the music playing module is a radio circuit.

5 13. The cellular phone as claimed in the claim 11, wherein the music playing module comprises:

a memory used to store a music file; and

an MP3 processing module used to play the music file.

14. A wireless earphone for receiving sound signals, comprising:

10 a Bluetooth module used to receive digital data;

a sound processing module used to decode the digital data;

an output unit used to output digital data decoded by the sound processing module; and

15 a microprocessor used to determine a format of the digital data and then send the digital data to the sound processing module directly or to the output unit after processing the digital data according to a determined result.

15. The wireless earphone as claimed in the claim 14, wherein the output unit comprises a left channel speaker and a right channel speaker.

20 16. The wireless earphone as claimed in the claim 15, wherein the left or right channel speaker is independently disposed in another housing via an extended line.

17. The wireless earphone as claimed in the claim 16, wherein the extended line is detachable.

18. The wireless earphone as claimed in the claim 14, further comprising a microphone, the microprocessor outputting voice signals received from the microphone via the Bluetooth module.